Title (en)

Method and apparatus for noise burst detection in a signal processor

Title (de)

Verfahren und Vorrichtung zum Erfassen von Rauschbursts in einem Signalprozessor

Title (fr)

Méthode et dispositif pour la détection des gerbes de bruit dans un processeur de signaux

Publication

EP 0552005 B1 19971119 (EN)

Application

EP 93300144 A 19930111

Priority

US 82111192 A 19920115

Abstract (en)

[origin: EP0552005A1] A signal processor such as an ADPCM decoder (28b) receives an input signal. As part of the CCITT Recommendation G.726 algorithm, ADPCM decoder (28b) processes the input signal to provide a linear reconstructed signal sr(k). When enabled, a noise detector (50) samples the reconstructed signal sr(k) once for each of a predetermined number of received samples. The noise detector (50) adds the absolute value of the reconstructed signal sr(k) to a total energy estimate. At the end of the predetermined number of samples, the noise detector (50) compares the total energy estimate to a product of a noise threshold and the predetermined number. If the total energy estimate exceeds this product, then a noise indication is provided. This calculation prevents the need for time-consuming division operation which is difficult for high-performance digital signal processors (70). <IMAGE>

IPC 1-7

H04B 14/06; H04B 1/10

IPC 8 full level

H04M 1/72502 (2021.01); **H04B 1/10** (2006.01); **H04B 14/06** (2006.01); **H04M 1/72505** (2021.01)

CPC (source: EP US)

H04B 1/1027 (2013.01 - EP US); **H04B 14/068** (2013.01 - EP US); **H04M 1/72502** (2013.01 - EP US); **H04M 1/72505** (2013.01 - EP US)

Cited by

EP0634845A3; EP0798908A1; EP0651521A3; SG105500A1; EP0854582A1; FR2758676A1; US7120781B1

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0552005 A1 19930721; **EP 0552005 B1 19971119**; CN 1038633 C 19980603; CN 1074570 A 19930721; DE 69315231 D1 19980102; DE 69315231 T2 19980402; JP 3268368 B2 20020325; JP H05268106 A 19931015; US 5319573 A 19940607

DOCDB simple family (application)

EP 93300144 A 19930111; CN 92112865 A 19921126; DE 69315231 T 19930111; JP 1942493 A 19930113; US 82111192 A 19920115